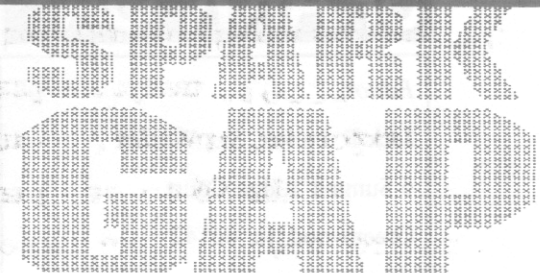


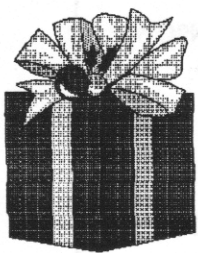
MARC



"Ham Radio News from Johnson County, Indiana"

Volume XIV No.12

December 1997



Merry Christmas



FREE DONUTS

Now that I have your attention. Join us for a morning of fellowship and toast a glass of milk, juice to one of the best Amateur Radio clubs in America. We will have plenty of coffee and donuts to go around. Our special guest speaker is noted contest DX'er Greg Clark-K9IG. Greg's ham shack is located in Bargersville where he tunes in the world to catch some of the rarest DX around.

Since there is no testing immediately following the meeting we'll have plenty of time for questions and socializing. Video tapes of past field days will be available for viewing. See ya Saturday December 20th at 8 a.m.

more than 500 W ERP and having either (1) a building-mounted antenna or (2) a non-building-mounted antenna with a height of less than 10 meters (approximately 33 feet) above ground level to lowest point of the antenna. It's fairly simple to calculate ERP. Take the PEP input to the antenna and multiply it by the numerical equivalent of the antenna gain in dBd (dB relative to a halfwave dipole in free space). Gain relative to an isotropic radiator (a point source), dBi, can be converted to dBd by subtracting 2.15 dB from the dBi number. For example, say your repeater puts out 100 W and has 3 dB of feedline loss. Calculate: $100 \times 0.5 = 50$ W to the antenna. The antenna has 8.8 dBd of gain, or 7.59 as a decimal. So the ERP is $50 \times 7.59 = 379.5$. ---ARRL Bulletin

FCC sets power limits

The FCC has released an erratum to its RF safety rules that sets 500 W ERP (effective radiated power) as the limit for most amateur repeaters before a routine RF safety evaluation would be required. This applies to repeater systems on all bands. A routine RF safety evaluation would be required for all repeater systems with

In This Issue:

VE Team takes winter break

Exam Fees to go up

Scanner law put on hold

Remember when "1992"

Dayton Hamvention stays put

SPARK GAP

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Membership Information

The Mid-State Amateur Radio Club is a Franklin Based organization open to all Amateur Radio operators in central Indiana.

The MARC meets the third Saturday of each month in the training room of the Johnson County Emergency Operations Center at 1100 Hospital Road in Franklin, In.

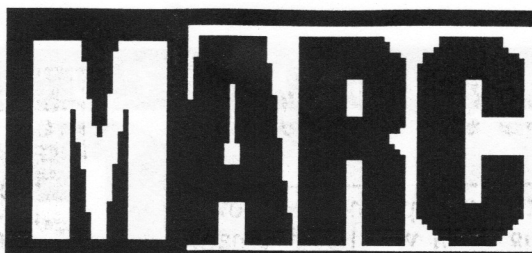
The MARC operates a 2-meter repeater at 146.835 Mhz. Each club member has free access to the repeater and autopatch.

Annual dues are \$18.00. VE Testing follows each meeting from March through November.

Submit stories to the editor on disk or via e-mail by the 3rd of each month.

Send change-of-address info and membership application to the club treasurer @ MARC , P.O. Box 836, Franklin, In. 46131.

The Spark Gap is published monthly by the Mid-State ARC.



CLUB OFFICERS

President:

Rick Reneau, KB9NDF

H. 780-1803

Vice President:

George Weimer, N9GW

H. 882-5081

Secretary:

Marilyn Parton, N9TUK

H. 535-9910

Treasurer/ARES:

Vernon Gill, N9QBO

H. 738-4575

RACES Director:

Richard Jasinski, KB9LJM

H. 889-8962

Repeater Trustee:

Dave Julian, WB9YIG

H. 887-9504

Activities:

Jack Parker, W8ISH

H. 881-0817

VE Team Coordinator:

Dave Wendt, KA9OOH

H. 974-1488

CYBERSPACE

Club Packet Station KB9LOC

Location: Johnson County EOC Amateur Radio Room

Frequency: 145.63 MHz

Purpose: To read and leave e-mail for club members

To be used for Health and Welfare traffic in emergencies

Can be used as Digipeter into WW9A and other packet nodes

Connect: Type KB9LOC-1 or EOCMBX or JOCO

VE Team takes 90 day break

Like a big sleeping bear the grumpy members of the Mid-State ARC VE testing team will be hibernating until spring 1998. Following a busy year of monthly testing sessions the team will take a break until next March. Our thanks to a great team and to everyone who made the effort during 1997 to upgrade or to become a first time ham.

According to VE Team Coordinator Dave Wendt-KA9OOH there were 107 exam elements given for a total of 45 new/upgrades. That figures out to be a 42% passing average.

The licenses awarded were:

Novice 1

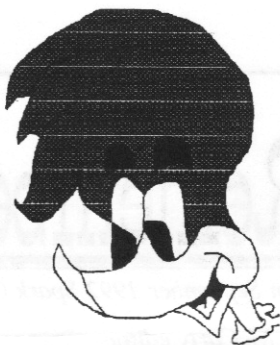
Tech 28

Tech Plus 10

General 2

Advanced 3

Extra 1



FCC begins ULS system

As a first step in implementing its new Universal Licensing System (ULS), the FCC's Wireless telecommunications Bureau is attempting to "populate" the ULS by getting licensees to register. Ultimately, the ULS will give hams and other licensees on-line access to make license updates and renewals, eliminating the need for hardcopy forms like the venerable Form 610. An FCC Public Notice this week said the ULS is aimed at combining the 11 different licensing systems the Bureau now uses--including Amateur Radio--into a single system. ULS registration requires supplying a Taxpayer Identification Number (for individuals, this is typically your Social Security Number) and "associated call signs." These could include your individual call sign plus any club station call signs "for which you are the trustee." All vanity call sign applicants must now supply a TIN as part of Form 159. A via the Internet is available. In addition to



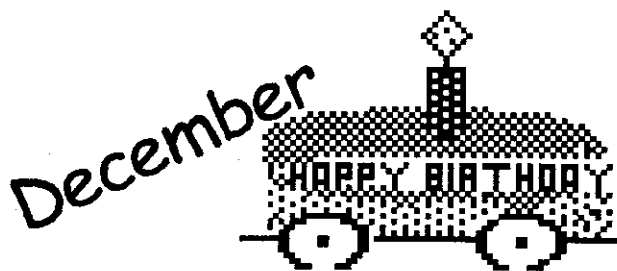
Mid-State ARC VE team members stopped for a Kodak moment following the October meeting. Pictured in front is Joe Rogers-KF9LQ.

Back row (L-R) Dave Wendt-KA9OOH, Jim Smith-WV9W, George Weimer-N9GW, Pat Wagner-WA9AAW, Jack Parker-W8ISH and Fred Bennett-N9TA.

ARRL/VEC test fee to rise

The ARRL/VEC test fee will be \$6.35 in 1998--up from \$6.25 in 1997. The announcement follows a November FCC Public Notice announcing 2.2% increase in the maximum fee reimbursement, to \$6.39. Volunteer Examiners (VEs) and Volunteer Examiner coordinators (VECs) may charge examinees for out-of-pocket expenses incurred in preparing, processing, administering, or coordinating examinations for amateur operator licenses. The amount of any such reimbursement fee from any one examinee for any one examination session, regardless of the number of elements administered, must not exceed the maximum allowable fee. --Bart Jahnke, W9JJ/FCC

providing basic name and address information, registration requires you to establish a password that you must use along with your TIN. The WTB says that once it has registration information and has implemented the ULS, it will streamline and simplify the FCC's ability to handle future administrative changes. *ARNs Newsletter*



Herold Losche	N9VYW	12/7
Robert Doles	WB9AYB	12/14
Joe Vergara	KA9ZPA	12/19
Stuart Hudson	NA9ENO	12/24
Marold Montgomery	N9DRN	12/29
Julie Moulton	N9ZCX	12/29
Steve Benson	N9NZI	12/31

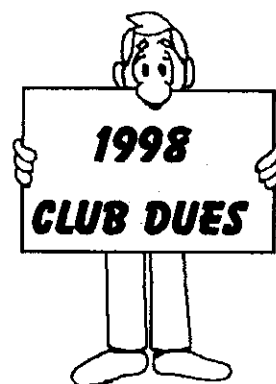
Dayton Hamvention will not move

The Dayton Hamvention will be staying put for at least a few more years, and definitely through the year 2000, when it will be the site of the ARRL National Convention. Hamvention and Hara Arena officials this week announced a five-year contract to keep the Hamvention in Dayton. That's the longest contract in their business relationship.

Indy possible site

According to a report by Angela Townsend in the Dayton Daily News, there had been talk that the Hamvention might leave Dayton for Columbus, Indianapolis, or even Atlanta after its current contract expired in one year. Hara Arena President Johnny Walker estimated that the Hamvention brings in \$7 million in revenue each year to the Dayton area. Approximately 28,000 attended the 1997 Hamvention. The 1998 Dayton Hamvention will be held May 15-17. Advance tickets are on sale now for \$15. Write Hara Arena Conference Center, 1001 Shiloh Springs Rd, Trotwood, OH 45415. -- thanks to Bev Priest, N8VZV --ARRL Newsletter

Mid-State ARC Treasurer Vernin Gill, N9QBO, will begin accepting dues for the 1998 year at the December 20th meeting. The \$18.00 fee is payable via cash or check to the Mid-State ARC. Each club membership includes phone patch privileges in and around Johnson county, a monthly newsletter and



occasionally a free donut and cup of coffee. All fees are used to maintain the club repeater and promote club activities like Field Day and the annual fall picnic. Dues may be mailed to: Mid-State ARC, P.O. Box 836, Franklin, In. 46131.

Remember When ?

From September 1992 Spark Gap

Mac McCarty editor

As reported in last month's newsletter, the Mid-State Amateur Radio Club has been offered the opportunity to relocate it's repeater to the WTVV tower in Trafalgar.

...By moving to the channel 4 tower we would eliminate the need for the current tower, grounding system and repeater shack.

...Early engineering studies indicate we will have hand-held coverage for 35 miles across the central part of Indiana.

Call your Congressman

Looking for an inexpensive way to make your voice heard on Capitol Hill? A new toll-free number is now available that puts callers directly through to the congressional switchboard.

The new number is 1-888-723-5246. It is not only free to callers, it does not cost taxpayers anything, either. The number is paid for by a coalition of labor unions. -WD9DVA-via the Internet

KY flooded with new radios

There was a silver lining to the clouds that brought heavy flooding to Northern Kentucky earlier this year. Ham radio's role in providing emergency communication in the flooding's wake has resulted in windfall for that region's hams -- courtesy of AT&T. Seventh District Emergency Coordinator John Meyers, N4GNL, of Covington, Kentucky, says AT&T has agreed to spend some \$100,000 to set up a VHF repeater, a UHF repeater, antennas, and a shack with air conditioning and heat at one of its cellular telephone sites. Other sites will be equipped as receive-only sites and tied back to the repeater. As part of the deal, the Northern Kentucky Amateur Radio Club agreed to cover the electricity and phone bills. Meyers says he's already gotten four Northern Kentucky counties (Campbell, Boon, Kenton and Pendleton) plus the City of Falmouth to pitch in for the utilities at the sites.

Hams only communications

Meyers says ham radio was the only means of communication for the first four days of the floods. Many of the club's members remained on duty to help out during the flood recovery. Hams' efforts during the flooding attracted the attention and respect of local governmental officials and of AT&T, which saw the possibility of a mutually beneficial arrangement. AT&T had been hoping to gain access to several possible cellular telephone antenna sites that had been off-limits. With the ham equipment on board, however, the cellular sites gained emergency communication status--just what was needed to get the moratorium lifted on their use by AT&T. "The

marriage came together really good," Meyers said. "AT&T needed some sites, and hams needed the coverage."

In addition to the Kentucky repeater, AT&T also plans to set up a similar emergency system for hams in Southwestern Ohio, which also suffered from this year's flooding. Meyers says AT&T's total commitment is in the area of \$300,000. When it's all in place, Meyers says, a huge region in Northern Kentucky, Southwestern Ohio and Southern Indiana will be accessible using a 2 W hand-held transceiver.

If all goes as planned, Meyers hopes to throw the switch on the first new repeater site in Edgewood, Kentucky, by year's end. --ARRL Newsletter

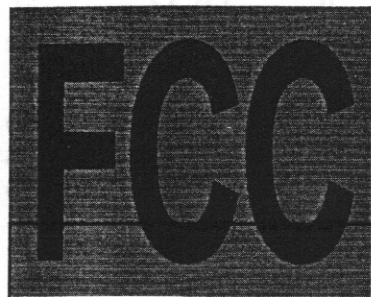
Hams & Humvees to the rescue

Late October brought unseasonably early and extremely heavy snowfall to the Rocky Mountain states and the Great Plains. Hams volunteered to help, providing emergency communications and other logistical support as residents in some cases found themselves without power, telephone service, or transportation.

Mike Proctor, KB0IAP, of Colorado Springs, Colorado, reports that the Pikes Peak District 14 ARES (PPARES) was called in to support the Colorado Springs Police Operations Center with staffing and transportation. As the storm became too much even for many 4x4 vehicles, the US Army sent in Humvees, and some hams were assigned to these for communications. Humvees were used to rescue stranded travelers and for emergency transport. By the third day of the storm, El Paso RACES requested PPARES to staff El Paso County Search and Rescue as RACES had exhausted its resources. In all, Proctor reports 85 hams took part --ARRL Newsletter

ELMER
BY
**RICH
REGENT
K9GDF**





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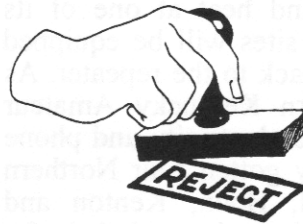
The FCC announced this month that as of January 1, 1998,

Amateur Radio applicants may only submit FCC Forms 610, 610 A and 610B that carry an edition date of September 1997. After the first of the new year, previous editions of Form 610 will not be accepted for filing by the FCC or by Volunteer Examiner Coordinators (VECs). Amateurs may begin using the new Form 610s now. The major change on the new form is a certification that says the applicant has "read and will comply with Section 97.13(c) of the Commission's Rules" regarding RF radiation safety and the amateur service section of OST/OET Bulletin No 65, Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields. But, Amateur Radio Supplement B of Bulletin 65, which has additional information on how to conduct a routine RF safety evaluation and explains other aspects of RF safety, is still in the draft stages and not yet available to the ham radio community. --*ARRL Newsletter*

SCANNER LAW: PUT ON HOLD

Hams, scanner enthusiasts and others are breathing a tentative sigh of relief this week. Their efforts apparently have paid off to convince House Telecommunications Subcommittee Chairman W. J. "Billy" Tauzin (R-La) that HR 2369, the Wireless Privacy Enhancement Act of 1997, was flawed legislation. Tauzin's so-called "scanner bill" has been rewritten to reflect the concerns of hams, volunteer firefighters, scanner enthusiasts and others. Many meetings, phone calls and letters with Tauzin's staff followed the introduction of the original bill. At Tauzin's request, the League submitted recommendations to narrow its scope. From Washington, ARRL Legislative and Public Affairs Manager Steve Mansfield, N1MZA, reports that most of those recommendations found their way into a

committee markup of the bill, released Wednesday, October 29. While the original version of HR 2369 covered the entire Commercial Mobile Radio Service (CMRS), the current version restricts its scope to just cellular telephone and the Personal Communications Service (PCS). Mansfield tempered his optimism with caution. "It is still too early to say whether the bill in its modified form, or in any other form, will ever become law," he said.



In introducing the substitute bill, Tauzin praised hams for their constructive cooperation. "The bill was never intended to prohibit the scanning of public safety frequencies or other noncommercial frequencies in which users have no expectation of privacy," he said. It was designed solely "to protect users of

wireless services that pay for such services." Mansfield said the League worked with a coalition of other organizations to make sure members' voices were heard on The Hill. Changes also were recommended by scanner interests including Uniden and Tandy. Unless Congress cuts corners, the bill still has a long way to go. "The ARRL will continue to work with committee staff to fine tune one of the bill's provisions that could have unintended consequences with regard to unrelated modification of equipment," Mansfield said.

In its original form, the bill had generated a good deal of controversy that boiled over into emotional letters and e-mail messages to Members of Congress. Some critics interpreted the bill as outlawing equipment that receives law enforcement, fire, EMS and other nonbroadcast services, and felt it could even prohibit listening to these transmissions. The ARRL believed it could also impede the ability of manufacturers to include expanded VHF and UHF receiving capability, something most hand-held and mobile transceivers now offer. While the League did not object to the original bill's efforts to curb cellular and PCS eavesdropping--something that's already illegal--its primary objection was that it could adversely affect the efforts of ham radio emergency volunteers, volunteer fire departments and other agencies that monitor public service frequencies using scanners.--*ARRL Newsletter*.



Weather Facts

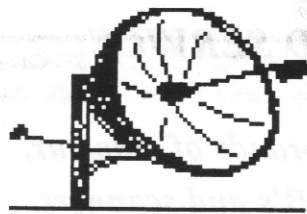
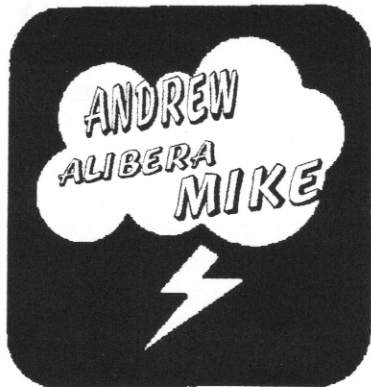
By Mike Rosemark, KA9VMR
NWS Meteorologist

Storms Get Early Retirement

Andrew, Mike, and Alibera will never again be troublemakers in the world of meteorology. You see, they are being retired. United Nations weather experts responsible for generating lists for tropical storms have decided that there will be no second chances for the some of the most vicious of hurricanes and typhoons.

Forty four names have been retired in the western hemisphere alone, never to be used again. These storms are among the worst in terms of devastation and loss of life and date as far back as records have been kept.

In the early 1900's, Alibera wrecked almost all the buildings in Manajary, Madagascar and Mike swept through the Philippines, killing hundreds and causing over \$350 million in damage. As most of you remember, Hurricane Andrew caused \$15 billion in damage to the United States in 1992. On average about 80 or so storms develop around the globe that reach hurricane strength of 74 mph. Six world regions have lists of names that are used once a low pressure system gains tropical storm status. Initially, the United States used only female names for tropical storms. In the interest of equality, male names were added to the list in the 1970's.



Little LEO's lacking support

Little LEO (non-voice, non-geostationary mobile satellite) interests have had a difficult time at WRC-97. While nothing is firm, the conference appears to be moving toward agreement that the segments 146 to 148, 170 to 230, and 406.1 to 430 MHz are not open for consideration for Little LEO allocations at this time. There has been little support outside Region 2 for any new Little LEO allocations. Most of the Little LEOs' interest has focused on 401 to 406 and 450 to 470 MHz, with some possibility of future studies of possible compatibility with broadcasting at 470 to 862 MHz. A compromise proposal from The Netherlands for a secondary allocation at 432 to 438 MHz for the Earth Exploration Satellite Service failed to gain sufficient support for adoption. Instead, it appears that a resolution will be proposed calling on the ITU-R to conduct urgent studies of the best band for such a satellite to operate in.

For the satellite to perform its intended function of studying the rain forest, the frequency chosen must be in the general vicinity of 400 to 500 MHz. This makes the selection of an operating frequency that will not interfere with other services very difficult, because this spectrum is heavily used by a variety of services all over the world.

Wind profiler radar issues appear to be close to resolution, with amateur satellite segments protected from being mentioned as appropriate for wind profiler operations.

Not too late for Vanity plate

It case you forgot it's not too late to reserve your Amateur Radio vanity plate for 1998. The Indiana Bureau of Motor Vehicles will take your \$2.00 reservation until December 31st.-MARC